



WLL260-F440

WLL260

FIBER-OPTIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
WLL260-F440	6020065

Included in delivery: BEF-W260 (1)

Other models and accessories → www.sick.com/WLL260

Detailed technical data

Features

Device type	Fiber-optic amplifier
Device type detail	Stand-alone
Dimensions (W x H x D)	25 mm x 77.8 mm x 63 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 mm ... 65 mm (Proximity system) ^{1) 2)} 0 mm ... 110 mm (Proximity system) ^{1) 3)} 0 mm ... 800 mm (Through-beam system) ²⁾
Sensing range	0 mm ... 50 mm, Proximity system ²⁾ 0 mm ... 90 mm, Proximity system ³⁾ 0 mm ... 700 mm, Through-beam system ²⁾
Type of light	Visible red light
Light source	LED ⁴⁾
Adjustment	Potentiometer, 270°
Indication	LED

¹⁾ Object with 90% remission (based on standard white, DIN 5033).

²⁾ LIS/LIB.

³⁾ With special fibre-optic cable.

⁴⁾ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage U_B	10 V DC ... 30 V DC ¹⁾
Ripple	$\leq 5 \text{ V}_{pp}$ ²⁾
Current consumption	35 mA ³⁾
Switching output	PNP
Switching mode	Light/dark switching
Switching mode selector	Selectable via light/dark selector
Response time	$\leq 0.7 \text{ ms}$ ⁴⁾
Switching frequency	700 Hz ⁵⁾
Connection type	Male connector M12, 4-pin
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	II ¹⁰⁾
Weight	120 g
Housing material	Plastic, ABS
Enclosure rating	IP66
Items supplied	Mounting bracket BEF-W260
Test input sender off	TE to V_S
Ambient operating temperature	-25 °C ... +55 °C
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	NRNT2.E128350 & NRNT8.E128350

¹⁾ Limit values when operated in short-circuit protected network: max. 8 A.

²⁾ May not fall below or exceed U_V tolerances.

³⁾ Without load.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ A = V_S connections reverse-polarity protected.

⁷⁾ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

⁹⁾ D = outputs overcurrent and short-circuit protected.

¹⁰⁾ Reference voltage: 50 V DC.

Safety-related parameters

MTTF_D	850 years
DC_{avg}	0 %

Certificates

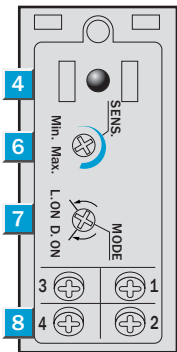
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cRUus certificate	✓

Photobiological safety (DIN EN 62471) certificate	✓
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Classifications

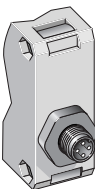
ECLASS 5.0	27270905
ECLASS 5.1.4	27270905
ECLASS 6.0	27270905
ECLASS 6.2	27270905
ECLASS 7.0	27270905
ECLASS 8.0	27270905
ECLASS 8.1	27270905
ECLASS 9.0	27270905
ECLASS 10.0	27270905
ECLASS 11.0	27270905
ECLASS 12.0	27270905
ETIM 5.0	EC002651
ETIM 6.0	EC002651
ETIM 7.0	EC002651
ETIM 8.0	EC002651
UNSPSC 16.0901	39121528

Adjustments

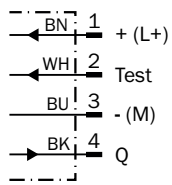


- ④ LED signal strength indicator, red
- ⑥ sensitivity control
- ⑦ Light/ dark rotary switch: L = light switching, D = dark switching

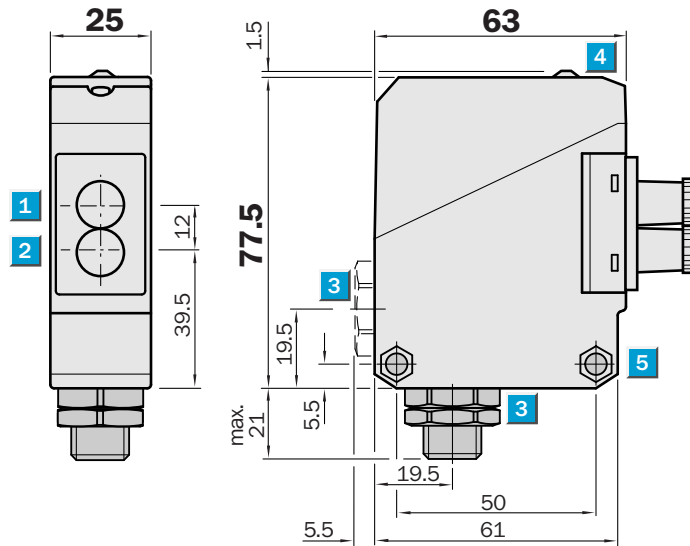
Connection type



Connection diagram Cd-078



Dimensional drawing



Dimensions in mm (inch)

- ① Center of optical axis, receiver
- ② Center of optical axis, sender
- ③ Cable entry gland 1/2" PF for cable diameter 6 to 10 mm optionally at bottom or rear
- ④ LED reception indicator, red
- ⑤ Mounting hole $\varnothing$ 5.2 mm, for M5 hexagon nuts on both sides

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

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